

RECLAMATION

Managing Water in the West

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Two-Year Exchange Agreements and/or Warren Act Contracts for Conveyance of non-Central Valley Project (Groundwater) in the Delta- Mendota Canal – Water Year 2010 through Water Year

FONSI-09-169

Recommended by:

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South-Central California Area Office

Date: _____

Approved by:

Acting Deputy Area Manager
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Date: _____



U.S. Department of the Interior
Bureau of Reclamation
South-Central California Area Office

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Two-Year Exchange Agreements and/or Warren Act Contracts for the Conveyance of Non-Central Valley Project (Groundwater) in the Delta-Mendota Canal – Water Year 2010 through Water Year 2011

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the U.S. Bureau of Reclamation (Reclamation), has determined that the approval of the issuance of two-year Exchange Agreements and/or two-year Warren Act contracts for the conveyance of non-Central Valley Project (groundwater) in the Delta Mendota Canal to requesting CVP contractors within the Delta Division and San Luis Unit for the 2010 Contract Year and ending 2012 is not a major federal action that would significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact is supported by Reclamation's Draft Environmental Assessment (EA) Number 09-169, *Two-Year Exchange Agreements and/or Warren Act Contracts for the Conveyance of Non-Central Valley Project (Groundwater) in the Delta Mendota Canal – Water Year 2010 through Water Year 2011*, and is hereby incorporated by reference.

Background

In 2010, and probably for several years to come, because of hydrologic conditions and/or regulatory constraints, the operation of the CVP by Reclamation, will likely result in less water being made available to the south-of-Delta (SOD) CVP water service contractors and State Water Project (SWP) contractors than is required to meet the demands of their customers. California experienced dry years in 2007, 2008, and 2009. The California Department of Water Resources is anticipating a fourth year of drought. In addition, due to operational, hydrological, and regulatory constraints, operation of the Federal Jones Pumping Plant will likely be limited and further reduce available CVP contract supplies in 2010. Pumping curtailments began in 2007 in response to Federal Judge Oliver Wanger's Delta Smelt interim Remedy Order. Water District members of the SLDMWA will need additional water to supplement their 2010 CVP water supply during another potential water shortage year.

Reclamation proposes to issue two-year Exchange Agreements and/or two-year Warren Act contracts to requesting CVP contractors within the Delta Division and San Luis Unit for the 2010 Contract Year and ending 2012. The term would be March 1, 2010 through February 28, 2011 for pumping and conveyance, and March 1, 2010 through February 29, 2012 for storage in San Luis Reservoir (SLR) and conveyance from the SLR.

Each participating contractor would be allowed to pump up to 10,000 acre-feet (AF) of non-CVP water into the DMC. Reclamation has capped the Proposed Action at 50,000 AF combined for all districts participating in the DMC Pump-in Program. The total amount of groundwater

pumped into the DMC will not exceed that 50,000 AF. Conveyance and storage of non-CVP water in CVP facilities would be subject to available capacity.

Table 2-1 is a list of the water districts that could potentially participate in this Proposed Action and the estimated pumping quantities:

Table 2-1 Warren Act Contract/Exchange Agreement Quantities for Groundwater Pumping into DMC

<i>District</i>	Quantity for 2010 (AF)
Byron Bethany Irrigation District	2,000
Banta Carbona Irrigation District	4,500
Del Puerto Water District	10,000
West Stanislaus Irrigation District	3,000
San Luis Water District	10,000
Panoche Water District	10,000
Pacheco Water District	5,000
Mercy Springs Water District	5,500
Total	50,000

The Delta-Mendota Canal 2010 Water Quality Monitoring Program – Groundwater will be adhered to.

The following conditions, as specified in the Exchange Contractors' letter, will be adhered to:

- No pumping will be allowed in Management Areas 2 and 3
- Any well that is proposed to pump into the lower DMC must obtain a current water quality analysis. The analysis shall consist of Ag Suitability and selenium, plus any other constituents Reclamation may require (Wells may be pumped for 24 hours in order to get the initial sample for water quality testing.) These tests will be conducted on a monthly basis for the duration of the pumping period. From the Exchange Contractors' perspective, pumping may be begin once they have received copies of current lab test results for salinity and selenium, recognizing the other constituents may take longer to obtain the lab results.
- Only wells that test at 1,500 ppm TDS or less at the well head will be allowed.
- Only wells that test at 2 ppb selenium or less at the well head will be allowed.
- The calculated degradation caused by the lower DMC wells shall not exceed 30 ppm. (The model developed by Reclamation during the 2008 and 2009 pumping program shall be used and Reclamation shall provide at least weekly updates of the reports to the Exchange Contractors.)
- At any time, the wells in the lower DMC will be shut off if the measured water quality at Check 20 on the DMC exceeds 450 ppm TDS in a single day. The wells may resume pumping after the average water exceedence no longer exists for three days. Wells with water quality at the well head of 450 TDS or less would be allowed to continue to pump and would be subject to this restriction.
- The water would be credited to the receiving district as a whole, not for specific growers.
- The wells will only run through February 28, 2011.

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

FINDINGS

Air Quality

Under the Proposed Action, Reclamation will issue two-year temporary Exchange Agreements and/or Warren Act contracts to requesting CVP contractors within the Delta Division and San Luis Unit for the 2010 contract year.

The majority of pumps to convey the water under the Proposed Action are electric. These pumps will not emit pollutants at the pump; the source of the pollutants originates at the power plant. Power plants are permitted based on their maximum operating potential. The additional electricity will not result in the power plant exceeding operating capacity, and, thus, the applicable emissions permit.

Very few pumps will be diesel pumps and will not exceed the de minimis thresholds.

In summary, the construction and operation of the Proposed Action will not cause a significant impact to air quality in the SJVAB or exceed applicable standards.

Water Resources

Each district will be limited to pumping a quantity below the "safe yield" as established in the groundwater management plan, in order to prevent groundwater overdraft and avoid adverse impacts. Safe yield is defined as the amount of groundwater that can be continuously withdrawn from a basin without adverse impact. The amount of water pumped into the DMC will be credited to that district. The quantity of groundwater pumped into the DMC by a district will then be delivered back into the district and used for irrigation purposes throughout the originating district. Though some of the water used for irrigation will be used up by evapotranspiration and evaporation, some will also seep back into the ground.

Every source of non-CVP water must be tested. Water quality and monitoring requirements are established by Reclamation to protect water quality in federal facilities by ensuring that non-CVP water does not impair existing uses or negatively impact existing water quality conditions. The Delta-Mendota Canal 2010 Water Quality Monitoring Program – Groundwater will be adhered to.

Land Use

The Proposed Action will utilize CVP water to allow district agricultural lands to remain in production, and to convey non-CVP water to other receiving areas to support existing farmlands and minimize the potential for fallowing agricultural land. No new lands would be cultivated with this water. The conveyance of the non-CVP water through CVP facilities would not contribute to changes in land use. The Proposed Action would not increase or decrease water supplies that would result in additional homes to be constructed and served. The approval to be covered under this EA would be for contract years 2010 through 2011.

Biological Resources

There would be no impacts to biological resources. Most of the habitat types required by species protected by the Endangered Species Act do not occur in the Proposed Action area. The Proposed Action will not involve the conversion of any land fallowed and untilled for three or more years. The Proposed Action also will not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species or birds protected by the Migratory Bird Treaty Act. Due to the fact that the Exchange Agreement and/or Warren Act contract related water will not reach streams containing listed fish species, there will be no affects to these species. No critical habitat occurs within the area affected by the Proposed Action and so none of the primary constituent elements of any critical habitat will be affected.

Potential effects to giant garter snakes would be expected only if the water quality parameters exceed concentrations or levels identified as toxic or of concerns. Daily water quality monitoring, with the requirement of pumps ceasing if water quality objectives are exceeded; however, will avoid such effects to the species. A brief “lag time” between detection of the exceedance (and the resultant shutting down of pumps) and the subsequent reduction in contaminant concentration will be no more than a day or two and will not cause any effect over the extremely short duration before the water quality standards are returned to the target levels.

There will be no new pumps or construction under the Proposed Action. There will be no effects to the giant garter snake due to groundwater overdraft, under this short term action, because groundwater will remain within the district.

The short duration of the water availability, the requirement that no native lands be converted without consultation with US Fish and Wildlife Service, and the stringent requirements for water quality will preclude any impacts to wildlife, whether federally listed or not.

Cultural Resources

The conveyance of non-CVP water will not harm any cultural resources as this is not the type of action that affects cultural resources.

Indian Trust Assets

There are no tribes possessing legal property interests held in trust by the United States in the water involved with this action, nor is there such a property interest in the lands designated to receive the water proposed in this action. This action will have no adverse effect on Indian Trust Assets.

Socioeconomic Resources

Under the Proposed Action, participating districts will receive a small supplemental supply to their CVP water supply. Since water supply allocations may be reduced, districts must find supplemental supplies in order to meet demand of agriculture production. Groundwater pump-ins from the district will help meet demand and help avoid reduction in agriculture production as a result of the anticipated dry year, but most likely additional water supplies will still be needed in order to alleviate all of the effects of the water shortage. There will be no significant impacts from the Proposed Action.

Environmental Justice

Implementing the Proposed Action will not cause any harm to minority or disadvantaged populations within the project area. A Warren Act contract will allow the water districts to use their non-CVP water for irrigation in their service area. The availability of this water will help maintain agricultural production and local employment since another dry year is anticipated. Therefore, there will be no significant impacts from the Proposed Action.

Climate Change

Global climate change is expected to have some effect on the snow pack of the Sierra Nevadas and the run off regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. Water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change will be addressed within Reclamation's operation flexibility and therefore surface water resource changes due to climate change will be the same with or without the Proposed Action.

Cumulative Impacts

Reclamation has made Warren Act contracts available in previous years whether it was a dry year or not. Most likely, this year more districts will be requesting Warren Act contracts since it is anticipated to be another dry year and groundwater is a potential supplement to the expected reduced CVP supply. This is a two-year action, and the cumulative amount of groundwater pumping the districts are limited to under this Proposed Action is 50,000 AF. However, districts can request a Warren Act contract separate from the project for up to 10,000 AF of non-CVP water, but this action would be analyzed in a separate environmental document. Additionally, in accordance with the Warren Act contract, Reclamation will continue to make these contracts available to requesting districts in future years, given that each district meets present and future requirements for Warren Act contracts.

Agricultural run-off and groundwater pump-in could have cumulative water quality effects to the Mendota Pool; however, the intensive monitoring programs on-going at the Pool and the relatively small change in constituent concentration over time of the blended water, there would be no cumulative impact.

Because of the connection between surface water and groundwater, unmanaged groundwater use will eventually affect other water users and may have significant impacts on the environment and economy. The cumulative effects of groundwater pumping and continued application of irrigation water to agricultural lands will contribute indirectly to the current groundwater conditions, and future trends as a result of decisions to be made regarding overdraft.

It is not known at this time the level of subsidence threshold that will cause a significant impact on the environment and economy. Under Reclamation's monitoring program, data will be collected to fill gaps in information as they relate to subsidence and groundwater quality, and changes made in order to safely maintain water quality and water levels above subsidence thresholds.